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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,409	12/22/1999	BRIAN A. PETERSEN	M-7907-US	4940

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EXAMINER

POLLACK, MELVIN H

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 10/22/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/469,409

Applicant(s)

PETERSEN ET AL.

Examiner

Melvin H Pollack

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14,15,17-20,22-25 and 27-29 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1, 3-12, 14,15, 17-20, 22-25, 27-29 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☒ Other: *see attached office action*.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/9/03 and 8/19/03 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 3-12, 14, 15, 17-20, 22-25, 27-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 4, 6, 7, 9-12, 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Lakshman et al. (5,951,651).

5. For claim 1, Lakshman teaches a method (see abstract) of packet processing (col. 1, lines 5-10) comprising:

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- a. Parsing a packet (col. 2, lines 21-26) using a first peripheral processor (Fig. 8a, #225), said packet having a header portion (Fig. 1; col. 1, lines 15-17), to determine a vector (col. 2, lines 25-50);
 - b. Coordinating processing using said vector (col. 6, lines 5-10);
 - c. Deconstructing said packet header to form header data (Fig. 4, 6; col. 6, lines 35-45) using a second peripheral processor (Fig. 8b, #260 and #276);
 - d. Searching one or more data structures based on said header data to produce search results (Fig. 7; col. 4, lines 48-67; col. 5, 41-65; col. 6, lines 13-30) using a third peripheral processor (Fig. 8b, #280);
 - e. Editing said packet (where editing can be modifying the header and/or filtering packets and/or other packet modification rules) based on said search results, said header data, and said vector (col. 6, lines 29-34) using a fourth peripheral processor (Fig. 8a, #295 and #225);
 - f. Wherein said coordinating comprises:
 - i. Storing data within a shared register set coupled to each of said peripheral processors (Fig. 8b, #279),
 - ii. Sharing said data with said parsing, said deconstructing, said searching, and said editing (col. 5, lines 5-17; col. 6, lines 25-34), and
 - iii. Monitoring said deconstructing, said searching, and said editing (Fig. 8a, #210; Fig. 8b, #260 and #265).
6. For claim 3, Lakshman also teaches buffering said packet before said parsing (col. 1, lines 30-31; col. 6, lines 7-10).

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7. For claim 4, Lakshman teaches that said deconstructing further comprises forming a search argument, and said searching uses said search argument (col. 4, lines 47-63).
8. Claim 6 is a system version of claim 1, and also teaches that a central processor is used to coordinate the method of claim 1, which Lakshman also teaches (Fig. 8a, #260).
9. For claim 7, Lakshman teaches that the central processor comprises a general purpose processor (col. 2, lines 50-53).
10. For claim 9, Lakshman teaches that the central processor comprises more than one processor acting in concert (col. 5, lines 45-50).
11. For claim 10, Laksham teaches that one or more of said peripheral processors comprise fixed logic circuits (col. 5, line 67).
12. For claim 11, Laksham teaches that one or more of said peripheral processors comprise programmable logic circuits (col. 6, line 1).
13. For claim 12, Laksham teaches that one or more of said peripheral processors comprise programmable state machine (col. 6, lines 1, 60-65).
14. For claim 14, Laksham teaches that said central processor and at least one peripheral processor together form at least a part of a single application specific integrated circuit (col. 5, line 67).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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16. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lakshman as applied to claim 1 above, and further in view of Spinney et al. (6,226,267).

17. For claim 5, Spinney teaches that said coordinating further comprises operating on said search argument to form a modified search argument prior to said searching, and said searching uses said modified search argument (col. 2, lines 20-35). Lakshman does not go into enough detail regarding the search technique to adequately disclose this item. At the time the invention was made, one of ordinary skill in the art would have used the Spinney search process to learn how to implement the Lakshman search process, and to allow the type of flow to be a searching parameter (col. 2, lines 49-65).

18. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lakshman as applied to claim 6 above, and further in view of Narad et al. (6,421,730).

19. For claim 8, Narad teaches that the central processor comprises a microsequencer (col. 40, lines 15-20). Lakshman does not expressly disclose this limitation. The examiner considers the type of processor to be a design choice. At the time the invention was made, one of ordinary skill in the art would have used a microsequencer to better implement clock cyclings (col. 40, lines 20-23).

20. As to claims 15, 17-20, 22-25, 27-29, they do not teach or define above the correspondingly rejected claims 1 and 3-5 and thus claims 15, 17-20, 22-25, 27-29 are rejected for the reasons given above.

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Conclusion


21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H Pollack whose telephone number is (703) 305-4641. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (703) 305-4003. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

MHP
09 October 2003


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER